

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

April 29, 2008

VIA E-MAIL

To:

Mike Ribordy, OSC, Emergency Response Branch

USEPA, Region V

From: Sharon Hanshue, MDNR; on behalf of the NRDA Trustees

Subject: Response to Erosion at Plainwell removal areas 6B and 7

High water during the late winter 2007 and early spring 2008 caused loss of some significant amount of bank material on the south bank of the Kalamazoo river downstream of the US 131 river crossing in removal areas 6B and 7. Several of the Trustees had an opportunity to review the conditions of the site on April 16 and we offer the following comments for your consideration of appropriate corrective action to stabilize the bank in this area.

The eroding face shows evidence of gray clay-like material indicative of paper waste. Both DEQ and EPA collected samples of this material and PCB is present at levels typical of the former impoundment waste. We strongly recommend that additional removal be performed to maintain the level of protection provided by the uncontaminated buffer zone provided by the approved design. To prevent over widening the river channel, clean fill material may be necessary to compensate for the additional waste removal. Arcadis may want to evaluate bank and toe sheer stress in this area using the current configuration of the channel width, with the dam in place and mid-channel prism of sediments in place and compare it to the anticipated post construction condition with the dam and mid-channel prism out using the current configuration of the channel width. We do not recommend that fill be placed over the top of the current bank to compensate for the material that has been eroded away, nor do we accept placing rock over the current face without reestablishing the buffer zone.

We recommend that river run rock stabilization be placed on the reconstructed bank only as is necessary to stabilize the new bank during the transition period as water levels are lowered and the mid-channel prism is lost. Water levels will be lower as the dam is removed, however this is in an area that is near the upper limits of the impoundment and may continue to be subject to high water levels. It is essential to allow herbaceous vegetation to become reestablished along this bank as quickly as possible to minimize large erosive losses of the bank in the future. It is also essential to remove a sufficient amount of contaminated material and reconfigure a clean bank buffer zone so that future high water events will mobilize only non-contaminated materials.



We would be happy to work with JF New and Arcadis on seeding and monitoring for bank revegetation. In fact, it would be useful to closely review field conditions in the early fall to target areas that are a high priority for vegetation or other stabilization to ensure they overwinter without significant damage.

Thank you for your consideration of these comments.

- cc. L Williams, USFWS
 - P. Synk, DAG
 - T. King, CDM
 - P. Bucholtz, DEQ
 - D. Devantier, DEQ
 - J. Gapp, DEQ
 - J. Lerg, DNR